

## **ABSTRACT**

The present invention provides for a method of producing mutant nucleic acid molecules comprising preparing a first and second oligonucleotide corresponding to two different mutations in a template nucleic acid, mixing the oligonucleotides with a template to which they correspond so as to hybridize and subjecting the mixture to the linear cyclic amplification reaction. The invention also provides a method of producing libraries of mutant nucleic acids using multiple site directed primers. The present invention is particularly well suited for the development of libraries of mutant nucleic acids.